

#6  
10/525726

Rec'd PCT/PTO 24 OCT 2005

## SEQUENCE LISTING

<110> Von Der Kammer, Heinz  
Pohlner, Johannes

<120> Diagnostic and Therapeutic Use of FOAP-13 Polynucleotides and  
Polypeptides for Neurodegenerative Diseases

<130> 2335.0060001

<140> To be assigned  
<141> Herewith

<150> 02019281.1

<151> 2002-08-28

<150> 60/406,303

<151> 2002-08-28

<160> 18

<170> PatentIn Ver. 2.1

<210> 1  
<211> 390  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: cDNA fragment  
of the foap-13 gene

<400> 1

tggttccctgg ctctccctca agagtgcagc cttggctaga gaactcacag ctctggaaaa 60  
aaggaggaca gacagggttc cctggggcca gtctcagccc agccactgat gctggatgac 120  
cttggcctga ccctggctcg gtctcagaat cactttccc atctgtaaaa ttgagatgaa 180  
ttttgggttt gaaagttctt cctggagcag atgtcctaga aggttttagg aatagtgaca 240  
gagtcaggcc accccaaggg ccatgggagc cagctgaccc gcttgaccga aggatttctg 300  
acagactatac tttggggatg tttcaagaa gggatataag ttatttactt tgggcattta 360  
aaagaaaatt tctctcgga ataattttat 390

<210> 2

<211> 491

<212> PRT

<213> Homo sapiens

<400> 2

Met Ala Gly Gln Gly Leu Pro Leu His Val Ala Thr Leu Leu Thr Gly  
1 5 10 15

Leu Leu Glu Cys Leu Gly Phe Ala Gly Val Leu Phe Gly Trp Pro Ser  
20 25 30

Leu Val Phe Val Phe Lys Asn Glu Asp Tyr Phe Lys Asp Leu Cys Gly  
35 40 45

Pro Asp Ala Gly Pro Ile Gly Asn Ala Thr Gly Gln Ala Asp Cys Lys

50	55	60
Ala Gln Asp Glu Arg Phe Ser Leu Ile Phe Thr Leu Gly Ser Phe Met		
65	70	75
Asn Asn Phe Met Thr Phe Pro Thr Gly Tyr Ile Phe Asp Arg Phe Lys		
85	90	95
Thr Thr Val Ala Arg Leu Ile Ala Ile Phe Phe Tyr Thr Ala Thr		
100	105	110
Leu Ile Ile Ala Phe Thr Ser Ala Gly Ser Ala Val Leu Leu Phe Leu		
115	120	125
Ala Met Pro Met Leu Thr Ile Gly Gly Ile Leu Phe Leu Ile Thr Asn		
130	135	140
Leu Gln Ile Gly Asn Leu Phe Gly Gln His Arg Ser Thr Ile Ile Thr		
145	150	155
Leu Tyr Asn Gly Ala Phe Asp Ser Ser Ala Val Phe Leu Ile Ile		
165	170	175
Lys Leu Leu Tyr Glu Lys Gly Ile Ser Leu Arg Ala Ser Phe Ile Phe		
180	185	190
Ile Ser Val Cys Ser Thr Trp His Val Ala Arg Thr Phe Leu Leu Met		
195	200	205
Pro Arg Gly His Ile Pro Tyr Pro Leu Pro Pro Asn Tyr Ser Tyr Gly		
210	215	220
Leu Cys Pro Gly Asn Gly Thr Thr Lys Glu Glu Lys Glu Thr Ala Glu		
225	230	235
His Glu Asn Arg Glu Leu Gln Ser Lys Glu Phe Leu Ser Ala Lys Glu		
245	250	255
Glu Thr Pro Gly Ala Gly Gln Lys Gln Glu Leu Arg Ser Phe Trp Ser		
260	265	270
Tyr Ala Phe Ser Arg Arg Phe Ala Trp His Leu Val Trp Leu Ser Val		
275	280	285
Ile Gln Leu Trp His Tyr Leu Phe Ile Gly Thr Leu Asn Ser Leu Leu		
290	295	300
Thr Asn Met Ala Gly Gly Asp Met Ala Arg Val Ser Thr Tyr Thr Asn		
305	310	315
320		
Ala Phe Ala Phe Thr Gln Phe Gly Val Leu Cys Ala Pro Trp Asn Gly		
325	330	335
Leu Leu Met Asp Arg Leu Lys Gln Lys Tyr Gln Lys Glu Ala Arg Lys		
340	345	350
Thr Gly Ser Ser Thr Leu Ala Val Ala Leu Cys Ser Thr Val Pro Ser		
355	360	365

Leu Ala Leu Thr Ser Leu Leu Cys Leu Gly Phe Ala Leu Cys Ala Ser  
370 375 380

Val Pro Ile Leu Pro Leu Gln Tyr Leu Thr Phe Ile Leu Gln Val Ile  
385 390 395 400

Ser Arg Ser Phe Leu Tyr Gly Ser Asn Ala Ala Phe Leu Thr Leu Ala  
405 410 415

Phe Pro Ser Glu His Phe Gly Lys Leu Phe Gly Leu Val Met Ala Leu  
420 425 430

Ser Ala Val Val Ser Leu Leu Gln Phe Pro Ile Phe Thr Leu Ile Lys  
435 440 445

Gly Ser Leu Gln Asn Asp Pro Phe Tyr Val Asn Val Met Phe Met Leu  
450 455 460

Ala Ile Leu Leu Thr Phe Phe His Pro Phe Leu Val Tyr Arg Glu Cys  
465 470 475 480

Arg Thr Trp Lys Glu Ser Pro Ser Ala Ile Ala  
485 490

<210> 3

<211> 2630

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: cDNA of the  
human foap-13 gene

<400> 3

cggacgcgtg ggcggacgacg tggggcgacg cgtggctct gggagtgtga aactgggaga 60  
gacggtaag ctggggacgg tattcagaat tcgagcgcag gagctccgct tctccacctg 120  
ctcccgggaa gctattggaa tccagagaat cacccgctga tggttttcc ccaggcctga 180  
aacaaccaga gagctacggg aaaggaaggg cttggcttc cagaggaatt ttccaagtgc 240  
tcaaacgcca ggcttacggc gcctgtgatc cgtccaggag gacaaagtgg gatttgaaga 300  
tccactccac ttctgctcat ggcggccag ggcctgcccc tgcacgtggc cacactgctg 360  
actgggctgc tggaatgcct gggcttgct ggcttcctct ttggctggcc ttcaactagtg 420  
tttgtcttca agaatgaaga ttactttaag gatctgtgt gaccagatgc tggccgatt 480  
ggcaatgcca cagggcaggc tgactgaaa gcccaggatg agagttctc actcatcttc 540  
accctggggt cttcatgaa caacttcatg acattccccca ctggctacat ctttgaccgg 600  
ttcaagacca cctgtggcacg cctcatagcc atattttct acaccaccgc cacactcattc 660  
atagccttca cctctgcagg ctcagccgtg ctgctttcc tggccatgcc aatgctcacc 720  
attggggaa tccctgttct catcaccaac ctgcagattt ggaacctatt tggcaaacac 780  
cgttcgacca tcatcactct gtacaatgga gcatttgact cttcctcgcc agtcttcctt 840  
attattaagc ttcttatga aaaaggcatc agcctcaggg ctccttcat ttcatctct 900  
gtctgcagta cctggcatgt agcacgcact ttcctcctga tgccccgggg gcacatccca 960  
tacccactgc ccccccaacta cagctatggc ctgtgccctg ggaatggcac cacaaaggaa 1020  
gagaaggaaa cagctgagca tgaaaacagg gagctacagt caaaggagtt ctttcagcg 1080  
aaggaagaga ccccaggggc agggcagaag caggaactcc gtccttctg gagctacgct 1140  
ttctctcgcc gcttgcctg gcacctggtg tggctgtctg tgatacagtt gtggcactac 1200  
ctcttcattg gcactctcaa ctccttgctg accaacatgg ccggggggaa catggcacga 1260  
gtcagcacct acacaaatgc cttgccttc actcagttcg gagtgctgtg tgccccctgg 1320

aatggccgtgc tcatggaccg gcttaaacag aagtaccaga aggaagcaag aaagacaggt 1380  
tcctccactt tggcggtggc cctctgctcg acgggtgcctt cgctggccct gacatccctg 1440  
ctgtgcctgg gcttcgcctt ctgtgcctca gtccccatcc tccctctcca gtacctcacc 1500  
ttcatctgc aagtgtatcg ccgccttc ctctatggg gcaacgcggc cttcctcacc 1560  
cttgcttcc cttcagagca ctttgcaag ctcttgggc tggtgatggc cttgtcggt 1620  
gtgggtgtctc tgctccagtt ccccatcttc accctcatca aaggctccct tcagaatgac 1680  
ccatttacg tgaatgtatcg gttcatgctt gccattcttc tgacattctt ccacccctt 1740  
ctggtatatac gggaatgccg tacttgaaa gaaagtccct ctgcaattgc atagttcaga 1800  
agccctcaact tttcagcccc gaggatggtt ttgttcatct tccaccacct ttgaggac 1860  
cgtgtcccaa aagactttgc ctatcccacg aaaacacaca cacacacaca cacacacaca 1920  
aaataaaagac acacaaggac gtctgcgcag caagaaaaga atctcagttt ccaaggcagat 1980  
tgatatacaca cagactcaaa gcaaaggcat gtggaaacttc tttatccaa aacagaagt 2040  
tctccttgca cttagcctt gcagaccctt gactccaggg gagatgac 2100  
gtgtgtcaac tatttcttta ggcctgtttt gctccgaagc ctatatgtc ctggatcctc 2160  
tgccacgggt taaatttca ggtgaagagt gaggttgtca tggcctcagc tatgcttcct 2220  
ggctctccct caagagtgcg gccttggcta gagaactcac agctctgggaaa 2280  
cagacagggt tccctggcc cagtctcagc ccagccactg atgctggatg accttggcct 2340  
gaccctggc tgggtctcaga atcaactttt ccattctgtaa aattttagatg aattttggtg 2400  
ttgaaagttc ttccctggagc agatgtccta gaagggtttt ggaatagtga cagagtca 2460  
ccaccccaag ggcatggga gccagctgac ctgcttgacc gaaggattt ctagacagacta 2520  
tcttgggaa tggtttcaag aaggatata agttatcc tttggcatt taaaagaaaa 2580  
tttctctcgg gaataatttt atagaaaaat aaagcttctg tgtctaaggc 2630

<210> 4  
<211> 13  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: one-base anchor oligonucleotide

<400> 4  
htttttttt tta

13

<210> 5  
<211> 13  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: One-base anchor oligonucleotide

<400> 5  
htttttttt ttg

13

<210> 6  
<211> 13  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: One-base anchor oligonucleotide

<400> 6  
htttttttt ttc

13

<210> 7  
<211> 23  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: primer for the foap-13 gene  
  
<400> 7  
tcaggtgaag agtgaggttg tca

23

<210> 8  
<211> 20  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: primer for the foap-13 gene  
  
<400> 8  
ggctgcactc ttgagggaga

20

<210> 9  
<211> 20  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: primer for the cyclophilin B gene  
  
<400> 9  
actgaagcac tacgggcctg

20

<210> 10  
<211> 19  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: primer for the cyclophilin B gene  
  
<400> 10  
agccgttgt gtcttgcc

19

<210> 11

<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: primer for the  
ribosomal protein S9

<400> 11  
ggtcaaattt accctggcca

20

<210> 12  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: primer for the  
ribosomal protein S9

<400> 12  
tctcatcaag cgtcāgcagt tc

22

<210> 13  
<211> 19  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: primer for the  
beta-actin gene

<400> 13  
tggAACGGTG AAGGTGACA

19

<210> 14  
<211> 19  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: primer for the  
beta-actin gene

<400> 14  
ggcaagggac ttccctgtaa

19

<210> 15  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: primer for the

GAPDH gene

<400> 15

cgtcatgggt gtgaaccatg

20

<210> 16

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer for the  
GAPDH gene

<400> 16

gctaaggcgt tggtggtgca g

21

<210> 17

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer for the  
transferrin receptor (TRR)

<400> 17

gtcgctggtc agttcgat t

21

<210> 18

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer for the  
transferrin receptor (TRR)

<400> 18

agcagttggc tggttaccc ctc

23